

## **File Specifications for Electronic Plan Submittals to the Iowa Department of Transportation**

Electronic plans submitted by consultants or local agencies to the Iowa Department of Transportation (Department) for letting by the Department shall conform to the following file specifications. Plans submitted according to these specifications will be accepted by the Department in lieu of paper copy submittals.

All electronic plans shall be submitted in Adobe Acrobat Portable Document Format (PDF). The Iowa DOT recommends submitting PDF files that are Version 1.4 or higher. This file version can be produced using the Adobe Acrobat Standard software, version 5.x or higher. However, earlier PDF file versions will be accepted. PDF files shall also conform to the following requirements:

### **1. Composition**

- a. The resolution of the PDF file shall be exactly 600 dpi (dots per inch).
- b. The recommended color setting for PDF files shall be black and white. However, if gray shading is necessary to allow a plan sheet to be more easily understood, then grayscale PDF files may be submitted. Full-color PDF files will not be accepted at this time.
- c. Raster images will be allowed inside of PDF files, but they shall follow the same color requirements noted above. Raster images contained inside of a PDF file should use JPEG compression.
- d. If the plan set contains less than 50 cross-section sheets, the entire plan set shall be submitted as a single, multi-page PDF file. If the plan set contains 50 cross-section sheets or more, two PDF files shall be submitted: one containing just the cross sections, and one containing all the other plan sheets.
- e. Each page in the PDF file shall be sized for printing on 11"x17" paper using landscape orientation.

### **2. Naming Convention**

- a. Each PDF file shall be named in using the contract I.D. number, which is derived from the Iowa DOT project number. For a plan that will involve multiple project numbers, contact the Iowa DOT administering office to determine which project number should be used to derive the Contract I.D. number.
- b. For projects let using a primary highway project number, the file name shall be CC-RRRS-PPP.pdf; for projects let using a non-primary highway project number, the file name shall be CC-XXXX-PPP.pdf, where:

CC	= the two-digit county number
RRR	= the three-digit route number
S	= the federal control section number
XXXX	= the four digit city control number or alpha-numeric county control number, and
PPP	= the three-digit parenthesis number for the project

Examples:

- Primary project number IMX-35-3(167)129--02-77 would be "77-0353-167.pdf".
- County project number FM-C085(93)--55-85 would be "85-C085-093.pdf".
- City project number STP-U-0155(614)--70-85 would be "85-0155-614.pdf".

If the cross-sections are submitted as a separate file, the file shall be named according to the same convention, except that "\_X-sec" shall be added to end of the file name. For example, the cross section file for NHS-30-2(105)-19--85 would be named "85-0302-105\_X-sec.pdf".

### 3. Other Plan Requirements

- a. For purposes of letting by the Department, wherever a professional engineer's or architect's certification appears in the plans, it shall include some type of visual indication that it has been signed. This may be accomplished in a variety of ways, including:
  - printing a hard copy of the plan sheet, signing the certification block by hand, and scanning the plan sheet into PDF file format; or
  - placing a scanned imaged of a hand written signature onto the designer's certification block before creating the PDF file from the CADD drawing; or
  - placing text or an image in the signature area of the certification block using one of Adobe Acrobat's electronic signature features; or
  - any other means that produces a clear visual indication that the plans have been signed, thereby distinguishing them as final plans submitted for letting.
- b. The PDF file shall not be locked or otherwise made un-editable.